

QUARTERLY ACTIVITY REPORT

Quarter ending 31 March 2023

Frontier Energy Limited (ASX: FHE; OTCQB: FRHYF) (Frontier or the Company) is pleased to provide its quarterly activity report for the quarter ending 31 March 2023.

During the quarter the Company released its Stage One Definitive Feasibility Study (DFS or the Study) whilst also securing a binding agreement from Water Corporation for up to 1,250 KI/day of water (one of two critical elements for green hydrogen production) for its flagship Bristol Springs Green Hydrogen Project (Project) in Western Australia.

HIGHLIGHTS

- **The Company released its DFS for Stage One green hydrogen production at the Project. The Study confirmed the Project's potential to be a low-cost, early mover in Australia's green hydrogen industry. Highlights include:**
 - *Total initial capital cost for Stage One of \$242.5 million (Preliminary Feasibility Study (PFS) \$236.2m), inclusive of the 114MW solar farm and the 36MW alkaline electrolyser*
 - *Forecast production increase to 4.9m kilograms per annum (Mkg pa) (PFS 4.4Mkg pa)*
 - *Total unit cost¹ (inclusive of capital) of \$2.77 per kg of hydrogen produced (PFS \$2.83 per kg), one of the lowest reported hydrogen costs in Australia*
- **The DFS related to Stage One production only. The Company's long-term strategy is to produce at least 1GW of renewable energy, sufficient for approximately 80 Mkg pa of green hydrogen**
- **Frontier and Water Corporation signed a binding Water Supply Agreement to deliver up to 1,250 KI/day of water to the Project**
 - *The Agreement allows for the provision of sufficient water for use in a 150MW electrolyser, which is four times the size proposed in Stage One*
- **The Company continued to advance discussions with a number of groups regarding foundation offtake for Stage One hydrogen production. These discussions included site trips and preliminary discussions of terms with a shortlisted group of potential offtakers. The Company will continue to keep the market updated as these discussions advance**
- **As at 31 March 2023, Frontier had cash of \$7.5m (unaudited, excludes Metallum cash balance)**
 - *Subsequent to the end of the quarter \$960k was received from the exercise of options*
 - *Shareholder approval for Executive Chairman Grant Davey participation in the October 2022 placement, will be sought in May (see below). Mr Davey applied for approximately \$1m in the Placement*

¹ Total unit costs = (total operating costs direct (annual) / annual production) + (total initial capital + total sustaining capital /life of operation production)

- The Company's AGM will be held on 26 May 2023. The Notice of Meeting and Explanatory Memorandum have been distributed to Shareholders

Definitive Feasibility Study confirms Bristol Springs as one of Australia's lowest cost, near-term green hydrogen producers

During the quarter, the Company released its DFS for Stage One of the Company's Project.

The Company engaged global engineering firm, GHD, to complete engineering and cost studies to provide a Class 3 CAPEX and OPEX estimate (10% - 15% accuracy) to assess the case for hydrogen production based on a 36 MW electrolyser. Incite Energy investigated maximum energy yield and costs for the 114MW solar plant. These pieces of work form the basis of the DFS.

The key inputs and outputs from the Study are summarised in Table 1 below.

Stats	Unit	DFS	PFS	Change
Life of operation	Years	25	25	-
Solar				
Energy Production (post degradation and availability) (Yr 1)	GWh	245	245	-
Annual Degradation	%	0.3	0.3	-
Availability	%	98	98	-
Solar Capacity	MWdc	114	114	-
Reserve Capacity Allocation	MW	24.5	24.5	-
Hydrogen				
Electrolyser – nameplate capacity	MW	36	36	-
Energy required to produce 1kg Hydrogen (End of Life)	KWh	55	55	-
Water consumption	L / hr	27,500	55,000	27,500
Hydrogen production (pa)	M kg	4.9	4.4	0.5
Excess energy sold (pa)	MWh	112,000	113,000	(1,000)
Average target load factor (max.)	%	91	91	-
Applied load factor	%	84	75	9
Costs – Operating				
Operating costs – Solar	A\$ m pa	\$3.2	\$3.2	-
Operating costs – Hydrogen	A\$ m pa	\$3.5	\$3.5	-
Operating costs (Power sales/purchases) ¹	A\$ m pa	(\$3.3)	(\$4.5)	\$1.2
Power Purchases Average Price - \$68/MWh	A\$ m pa	\$9.5	\$7.7	(\$1.8)
Excess Power Sales Average Price - \$30/MWh	A\$ m pa	(\$3.3)	(\$4.5)	(\$1.2)
Large Generating Certificates (LGCs) Average Price - \$45	A\$ m pa	(\$4.7)	(\$4.7)	-
Capacity Credit Average Price - \$193,000	A\$ m pa	(\$4.8)	(\$3.0)	\$1.8
Total Operating Costs (Direct)²	A\$ m pa	\$3.4	\$2.2	\$1.2
Capital				
Stage 1 – Solar	A\$ m	\$157.9	\$166.3	\$8.4

Stage 1 – Hydrogen	A\$ m	\$84.6	\$69.9	(\$14.7)
Total Initial Capital	A\$ m	\$242.5	\$236.2	(\$6.3)
Sustaining Costs ³	A\$ m	\$11.7	\$11.7	-
Total Capital Costs	A\$ m	\$254.2	\$248.5	(\$6.3)

Table 1: Key Production and Costing Assumptions

1 – Operating costs (power sales/purchases) = Power purchased from the grid (during off peak) – Excess power sales (on the grid) – Capacity Credits – Large Generation Certificates). All assumptions regarding each [sub cost] are outlined in the Study
 2 – Excludes financing, depreciation and corporate costs
 3 – Replacement Stack required after 90,000 hours. Replacement of solar panels are inclusive within Operating Costs - Solar

The Study forecasts annual green hydrogen production of approximately 4.9 Mkg pa. This is an increase of 11% compared to the PFS (4.4Mkg pa). The increase in production is a result of a higher efficiency/load factor for the electrolyser, which has increased from 75 % (PFS) to 84% (DFS).

The higher load factor is driven by increasing the amount of energy acquired from the grid during off-peak periods (ie: 9pm – 6am). This higher load factor assumption is still below the maximum load factor for the electrolyser of 91% stated in the Pre-FEED Study.

Based on revised assumptions and key inputs the Study results in a total production cost² of approximately \$2.77 per kilogram of hydrogen. The breakdown of the key inputs is illustrated in Table 2 below.

Hydrogen Production	4.9M kg pa		
Costs – Direct Operating	Unit	Cost pa (A\$ m)	Unit cost \$/kg
Operating costs – Solar		3.2	0.65
Operating costs – Hydrogen		3.5	0.71
Power Purchases from the grid Average Price - \$68/MWh		9.5	1.94
Total Operating Costs (Direct)	\$/kg		3.31
Capital			
Total Capital Costs \$254.2 over a 25 yr life of operation		10.1	2.08
Total cost per kg of Hydrogen produced before additional solar revenues	\$/kg		5.38
Less By Product (solar) Revenues			
Excess Power Sales on the grid Average Price - \$30/MWh		(3.3)	(0.67)
LGCs Average Price - \$45		(4.7)	(0.96)
Capacity Credit Av. Price - \$193,000		(4.8)	(0.98)
Total By-Product Revenue	\$/kg		(2.61)
Total cost per kg of Hydrogen produced	\$/kg		2.77

Table 2: Unit costs breakdown

The highlight of the Study is the low cost of hydrogen production. This low cost is due to two major factors. The first is the low initial capital cost due to surrounding existing infrastructure.

² Total unit costs = (Total Operating Costs Direct (Annual) / Annual Production) + (Total Initial Capital + Total Sustaining Capital / Life of operation production)

This includes access to existing water pipeline, connection to the South West Interconnected System (SWIS) at the Landwehr Terminal as well as local skilled existing work force (meaning no camp and other related infrastructure). More remotely located projects are highly unlikely to have these benefits, therefore would have significantly increased capital costs.

The second driver for low costs is the Project's ability to utilise existing mechanisms that can be enabled by the connection to the SWIS at the Landwehr Terminal. This provides additional solar related income (classified in the Study as a negative cost). This includes unused daytime solar energy sales, Reserve Capacity Credits and the sale of excess Large-Scale Generation Certificates (LGC) credits.

There is limited publicly available information regarding other green hydrogen projects in Australia due to the infancy of the sector as well as the majority of other projects being privately owned. The Australian Renewable Energy Agency (ARENA)³ and other third-party reports have identified potentially significantly higher costs⁴ for the industry when compared to the forecast costs for the Project.

Further details regarding the Study can be found on the Company's website.
<https://frontierhe.com/>



Figure 1: Impression of the Stage One solar farm at the Bristol Springs Project

³ <https://arena.gov.au/blog/how-could-renewable-hydrogen-power-our-lives/>

⁴ <https://www.infolink-group.com/energy-article/green-hydrogen-costs-in-australia-to-reduce-37-by-2030>

Binding Agreement signed with Water Corporation

During the quarter the Company and Water Corporation executed a binding Water Supply Agreement (Agreement). This Agreement ensures the availability of up to 1,250kl/day of water for the Project's green hydrogen production strategy. Water is one of two essential elements required for green hydrogen production, the other being renewable energy.

Water will be supplied to the Project via the Stirling Trunk Main, which carries water from the Southern Dams and the Southern Seawater Desalination Plant to the Integrated Water Supply Scheme (IWSS). The Stirling Trunk Main is located approximately 3km from the proposed location of the hydrogen facility as shown in Image 2 below.

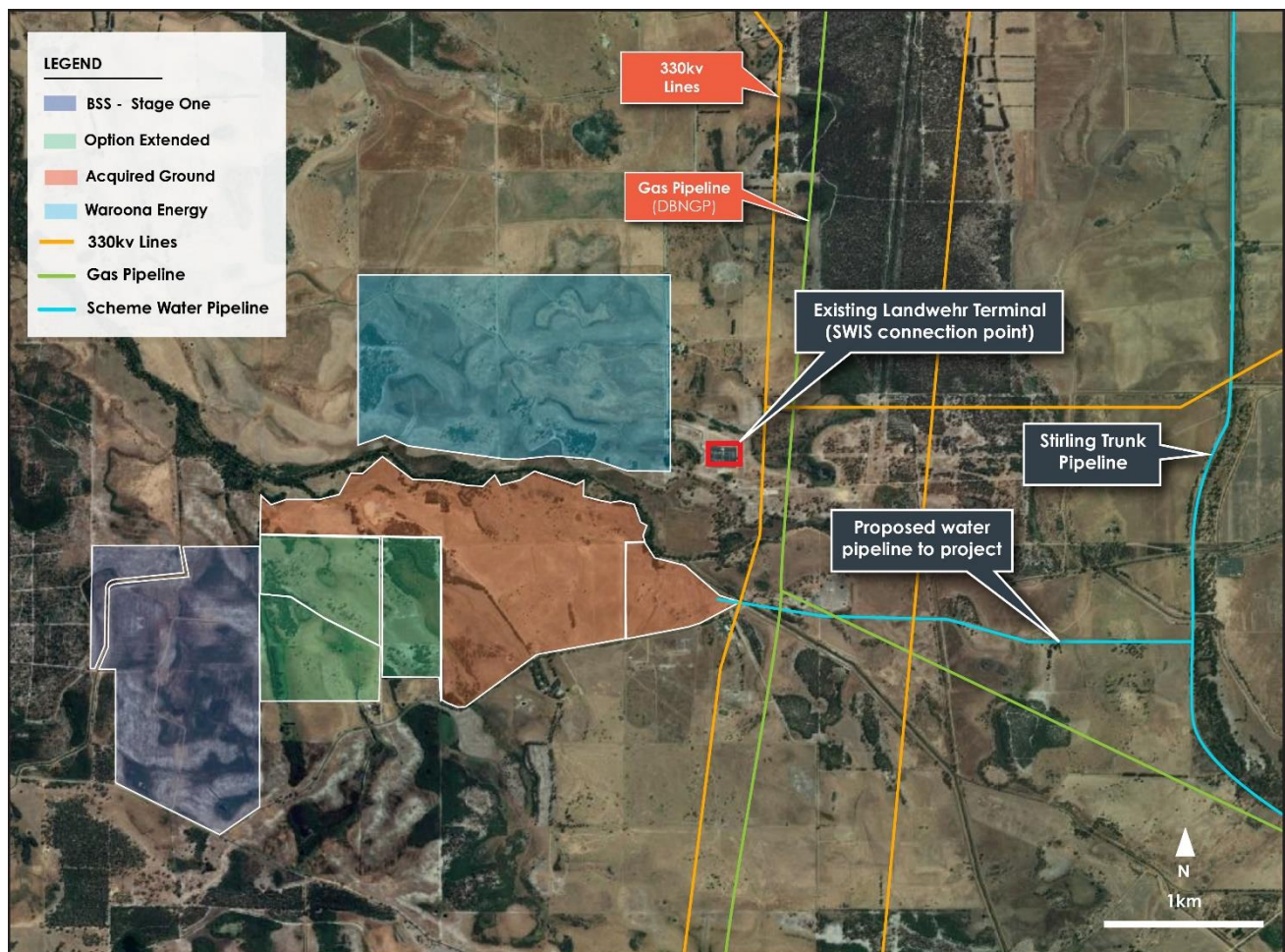


Figure 2: Stirling Trunk Main pipeline and other key infrastructure at BSS Project

Key terms of the Water Supply Agreement include:

- Commencement Date is up to 31st December 2024, conditional on the Project achieving a Final Investment Decision;
- Term – initial term of 15 years from the Commencement Date;
- Maximum Allowable Instantaneous Rate and resulting Daily Entitlement – initially 520l/min and 750kl/day, increasing to 868l/min and 1,250kl/day; and

- All costs are in-line with the Pre-Feasibility Study (ASX Announcement – 4th August 2022).



Figure 3: Stirling Trunk Main pipeline outcropping at the Project

Corporate

Cash at the end of the Quarter

As at 31 March 2023, Frontier had cash on hand of \$7.5m (unaudited, excludes Metallum cash balance).

Subsequent to the end of the quarter \$960,000 was received from the exercise of both 22c and 26c options (all expiring 29 January 2024).

The Company participated in a Metallum capital raising during the quarter paying \$1.3m for new shares. Further information regarding Metallum is discussed below.

As a result of the Group having control over MZN, the cash flows of MZN are consolidated in the Appendix 4C quarterly cash flow report. This therefore increases the cash position in the cash flow report to \$21m.

Metallum Resources Inc.

As part of the divestment of the Superior Lake zinc asset, Ophiolite Holdings Pty Ltd, which Frontier holds an 87.5% interest in, owns 128.9m shares in TSXV listed, Metallum Resources Inc

(MZN.TSXV). This holding has a current valuation of approximately A\$3.58m (share price C\$0.025 per share – 18 April 2023).

During the quarter, Metallum undertook a C\$9m capital raising. For completion of this raising, shareholder approval is required for the acquisition of Waroona Energy Pty Ltd. The shareholder meeting will take place on the 10 May 2023.

Frontier participated in the placement by subscribing for 19,695,883 shares for a total cost of approximately \$1.3m. Assuming shareholder approval, Frontier will own 147.6m shares in Metallum. However, due to the proposed acquisition and additional dilution from the capital raising, the Company's ownership in Metallum will be diluted to approximately 20%. Further details regarding Metallum and their strategy moving forward can be accessed here: <http://www.metallumzinc.com>

Annual General Meeting and Subscription for \$1m of Shares

The Company's AGM will be held on 26 May 2023, with the [Notice](#) of Meeting and Explanatory Memorandum having already been distributed to Shareholders.

Resolution 7 deals with the proposed issue of shares to Director Grant Davey to complete his subscription for \$1m of shares in the Company (at \$0.42 per share). This proposed issue formed part of the \$10m capital raising (before costs) otherwise completed during the December quarter, and which was strongly supported by institutional and high-net-worth investors demonstrating the market's significant support for the Company.

All remaining Directors have recommended that the relevant resolution be passed so that the Company receives the benefit of this additional working capital.

Change in Company Secretary

During the quarter, Ms Catherine Anderson (B Juris (Hons) LLB (UWA)) was appointed Company Secretary. Catherine is a legal practitioner admitted in Western Australia and Victoria with over 30 years' experience in high-level private practice, in-house and consultancy roles, particularly in the area of capital raisings, corporate acquisitions, structuring and regulatory compliance. She has advised on all aspects of corporate and commercial law and brings extensive experience to the Company over a range of industries, in particular the mining and IT/cyber security sectors.

Ms Anderson replaces Mr Chris Bath as the Company Secretary, however Mr Bath remains an Executive Director and CFO for the Company.

Payments to Related Parties

During the Quarter, payments to related parties for directors' fees totalled \$228,188.

Mr Grant Davey, who is a Director of the Company, is a director and shareholder of Matador Capital Pty Ltd ("Matador Capital"). The Company makes payments to Matador Capital under Shared Services and Office Use Agreements in which Matador Capital provides office space, general office administration services and accounting services to the Company. The services provided by Matador Capital are recovered from the Company on a cost-plus basis and totalled \$211,902.

Use of Funds

In relation to the Company's Quarterly Activity Report and Appendix 4C for the quarter ended 31 March 2023, the Company provides a comparison of expenditure against the Use of Funds as set out in the Company's Prospectus dated 12 January 2022 pursuant to Listing Rule 4.7C.2.

Use of funds	Prospectus	Actual spend
Land Options	1,650,000	1,650,000
Lease Fees	220,000	160,000
Solar Feed	265,104	265,104
Generator Model Study	126,500	126,500
Interconnection Works	55,000	42,892
Solar Financing	154,000	-
Solar Offtake	572,000	203,321
Solar Expansion Study	123,750	123,750
Battery Integration Study	74,250	74,250
Wind Integration Study	126,500	126,500
Hydrogen Integration Study	234,850	234,850
Corporate Costs	2,873,220	2,873,220
Transaction Costs	741,630	741,630
Working Capital	783,196	-
TOTAL	8,000,000	6,622,017

Table 3: Use of funds

The increase in corporate costs compared to the prospectus reflect significant progress with the BSS Project since re-listing in March 2022, with the Company expanding its Board, undertaking greater than expected investor relations and stakeholder engagement activities and incurring higher than expected compliance costs.

Authorised for release by Frontier Energy's Board of Directors.

To learn more about the Company, please visit www.frontierhe.com, or contact:

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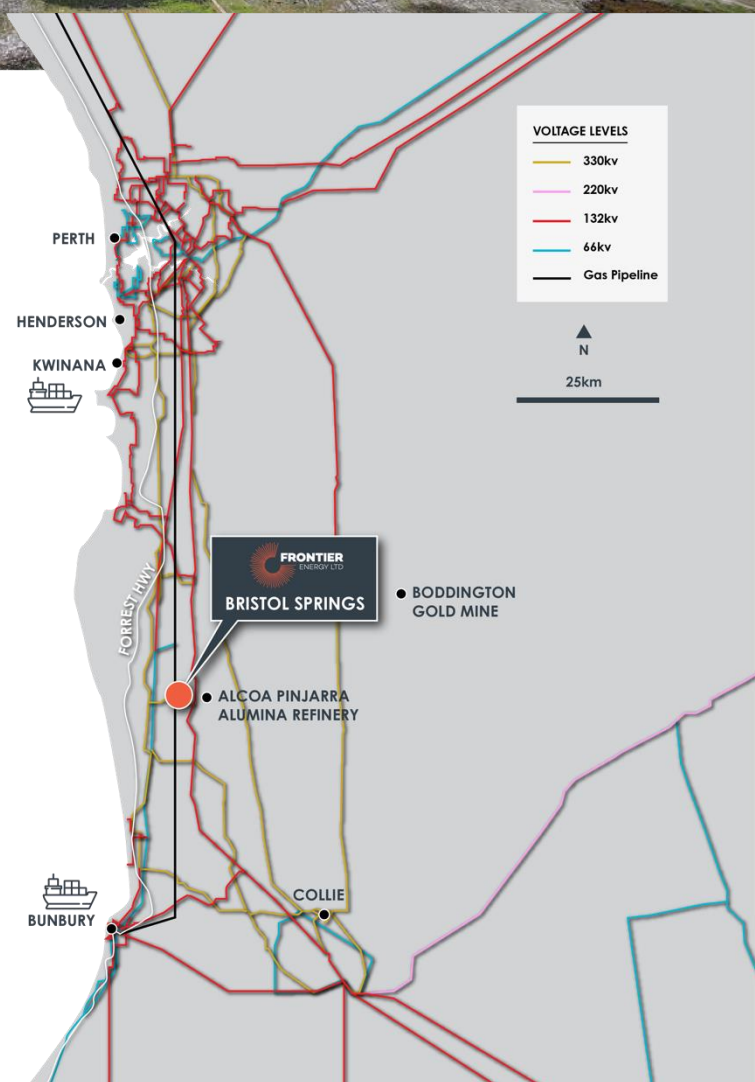
About Frontier Energy

Frontier Energy Ltd (ASX: FHE; OTCQB: FRHYF) is developing the Bristol Springs Green Hydrogen Project (the Project) located 120km from Perth in Western Australia.

The Company recently completed a Definitive Feasibility Study¹ that outlined the Project's potential to be both an earlier mover and one of the lowest cost green hydrogen assets in Australia.

The Project benefits from its unique location surrounded by major infrastructure. This reduces operating and capital costs compared to more remote hydrogen projects, whilst also being surrounded by likely early adopters into the hydrogen industry in the transition from fossil fuels.

¹ASX Announcement 20th March 2023



Directors and Management

Mr Sam Lee Mohan
Managing Director

Mr Grant Davey
Executive Chairman

Mr Chris Bath
Executive Director

Ms Dixie Marshall
Non-Executive Director

Ms Amanda Reid
Non-Executive Director

Registered Office

Level 20, 140 St Georges Terrace
Perth WA 6000

Share Registry

Automatic Registry Services
Level 5, 126 Philip Street
Sydney NSW 2000

For a comprehensive view of information that has been lodged on the ASX online lodgement system and the Company website, please visit asx.com.au and frontierhe.com, respectively.

Appendix 4C

Quarterly cash flow report for entities subject to Listing Rule 4.7B

Name of entity

Frontier Energy Limited

ABN

64 139 522 553

Quarter ended ("current quarter")

31 March 2023

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) research and development	-	-
(b) product manufacturing and operating costs	-	-
(c) advertising and marketing	-	-
(d) leased assets	-	-
(e) staff costs	(334)	(334)
(f) administration and corporate costs	(478)	(478)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	64	64
1.5 Interest and other costs of finance paid	(4)	(4)
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	-
1.8 Other (Metallum - exploration expenditure)	(3)	(3)
1.8 Other (Study)	(3)	(3)
1.9 Net cash from / (used in) operating activities	(758)	(758)

2. Cash flows from investing activities		
2.1 Payments to acquire or for:		
(g) entities	-	-
(h) businesses	-	-
(i) property, plant and equipment	(204)	(204)
(j) investments	-	-
(k) intellectual property	-	-

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (3 months) \$A'000
	(l) other non-current assets (exploration and evaluation assets)	(110)	(110)
2.2	Proceeds from disposal of:		
	(a) entities	-	-
	(b) businesses	-	-
	(c) property, plant and equipment	2	2
	(d) investments	-	-
	(e) intellectual property	-	-
	(f) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(312)	(312)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (share subscription receipts (shares not issued))	8,637	8,637
3.10	Other (lease payments)	(46)	(46)
3.11	Net cash from / (used in) financing activities	8,591	8,591

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (3 months) \$A'000
4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	13,455	13,455
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(758)	(758)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(312)	(312)
4.4	Net cash from / (used in) financing activities (item 3.11 above)	8,591	8,591
4.5	Effect of movement in exchange rates on cash held	64	64
4.6	Cash and cash equivalents at end of period	21,040	21,040

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	21,040	21,040
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	21,040	21,040

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	440
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
<i>Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.</i>		

7.	Financing facilities <i>Note: the term "facility" includes all forms of financing arrangements available to the entity.</i> <i>Add notes as necessary for an understanding of the sources of finance available to the entity.</i>	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	Total financing facilities	-	-
7.5	Unused financing facilities available at quarter end		-
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(758)
8.2	Cash and cash equivalents at quarter end (item 4.6)	21,040
8.3	Unused finance facilities available at quarter end (item 7.5)	-
8.4	Total available funding (item 8.2 + item 8.3)	21,040
8.5	Estimated quarters of funding available (item 8.4 divided by item 8.1)	27.8
<i>Note: if the entity has reported positive net operating cash flows in item 1.9, answer item 8.5 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.5.</i>		
8.6	If item 8.5 is less than 2 quarters, please provide answers to the following questions:	
8.6.1	Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?	
	Answer: Not applicable	
8.6.2	Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?	
	Answer: Not applicable	
8.6.3	Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?	
	Answer: Not applicable	
<i>Note: where item 8.5 is less than 2 quarters, all of questions 8.6.1, 8.6.2 and 8.6.3 above must be answered.</i>		

Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 28 April 2023

Authorised by: **By the Board**

(Name of body or officer authorising release – see note 4)

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standard applies to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.